

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

Conditional Major / Minor Revision

Permit: F-04-023 R2

Canton Cooperage Company, LLC.

Frankfort, KY 40601

August 28, 2007

Esmail Hassanpour, Reviewer

SOURCE ID: 21-155-00035

AGENCY INTEREST: 46439

ACTIVITY: APE20070001

CURRENT PERMITTING ACTION:

MINOR REVISION F-04-023 R2

Canton Cooperage Company, LLC. applied to the Kentucky Division for Air Quality, on June 28, 2007, for a minor modification to their existing permit at 365 South Woodlawn Avenue in Lebanon, KY. The facility currently has an operating permit (F-04-023 R1), and manufactures white oak barrels and toasted oak chips for the wine industry. The source is adding a new oak chip grinding operation with the grinder rated at 0.05 tons per hour (EP 10); transfer augers rated at 0.5 tons per hour (EP 11); and an oak chip bagging operations with the chip hopper's loading rate at 0.12 tons per hour (EP 12). These additions have been on site for some time but were inadvertently excluded from the revision 1 application. The source is removing the stave mill operations (EP 01). These additions qualify as insignificant activities per 401 KAR 51:030, Section 6 as the potential emissions are less than 5 tons per year of any regulated air pollutants.

PAST PERMITTING ACTIONS:

MINOR REVISION - F-04-023 R1

An application submitted by Canton Cooperage, LLC. for a minor modification to their existing permit was received on May 16, 2006. This revision will increase the maximum capacity of emission Point 5, Oak Chip Production, and add a new wood boiler and associated wood hopper. Initial oak chip production levels were based on data provided by an out-of-state oak chip production facility. Based on one year's chip production, the equipment has been determined to produce more than previously estimated levels. The new maximum rated capacity for processing oak chips is 20,006 tons/year, which is a 6.3 tons/year increase in emissions from the initial application. The new wood waste boiler (EP9) is rated at 3.312 mmBtu/hour and will be used to create steam for the plant. Fly-ash will be reinjected into the firebox and any remaining ash will be collected by the attached cyclone, rated at 98.4 % efficiency. A new wood waste hopper (EP8) will be used to hold sawdust and woodchips generated from the cooperage operations. A cyclone, rated at 80% efficiency, will be used to control particulate emissions.

APPLICABLE REGULATIONS:

For Emission Unit 02, 03, and 05:

401 KAR 59:010, New Process Operations, applicable to an emission unit that commenced on or after July 2, 1975.

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COMMENTS:

EP-02: Cooperage Operations (Barrel Manufacturing)

The various wood working equipments is used to plan and profile the wood used in the barrel making process.

Pursuant to 401 KAR 59:010, Section 3(2)(a), particulate matter emissions shall not exceed 3.76 lbs/hour based on a 3-hour average. Compliance shall be demonstrated by the following emission calculation: Particulate matter emissions in pounds per hour = monthly amount of wood processed in tons/month)(1 month/hours of operation that month)(emission factor of 6.0 lb/ton)(1 - control efficiency of 85 %)

Pursuant to 401 KAR 59:010, Section 3(1), no person shall cause, suffer, allow or permit a continuous emission into the open air from a control device or stack associated with any affected facility, which is equal to or greater than 20 % opacity.

EP-04: Barrel Toasting Operations

Barrel toasting used the larger pieces of waste from the manufacturing processes and is used to toast the barrels.

Pursuant to 401 KAR 59:010, Section 3(2) (a), particulate matter emissions shall not exceed 2.34 lbs/hour based on a 3-hour average. Compliance shall be demonstrated by the following emission calculation: Particulate matter emissions in pounds per hour = (monthly amount of wood processed in tons/month) (1 month/hours of operation that month)(emission factor of 6.0 lb/ton)(1 - control efficiency of 80 %)

Pursuant to 401 KAR 59:010, Section 3(1), no person shall cause, suffer, allow or permit a continuous emission into the open air from a control device or stack associated with any affected facility, which is equal to or greater than 20 % opacity.

EP-05: Chip Manufacturing Operations:

Oak wood log cores are processed through a chipper. Plain chips are immediately bagged for shipment. Other chips are run through an oven and toasted and are then bagged and shipped. If the consumer requests more granular chips, the wood chips are processed through a grinder, then bagged and shipped.

Pursuant to 401 KAR 59:010, Section 3(2) (a), particulate matter emissions shall not exceed 5.99 lbs/hour based on a 3-hour average. Compliance shall be demonstrated by the following emission

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calculation: Particulate matter emissions in pounds per hour = (monthly amount of wood processed in tons/month) (1 month/hours of operation that month)(emission factor of 6.0 lb/ton)(1 - control efficiency of 80 %)

Pursuant to 401 KAR 59:010, Section 3(1), no person shall cause, suffer, allow or permit a continuous emission into the open air from a control device or stack associated with any affected facility, which is equal to or greater than 20 % opacity.

EMISSION AND OPERATING CAPS DESCRIPTION:

The source shall be limited to emissions less than 90 tons per year of any regulated air pollutant, to preclude the applicability of 401 KAR 52:020. The potential emissions of Carbon Monoxide emission (CO) and Volatile Organic Compounds (VOC) are more than 100 tons per year from the source operating at full capacity. However, the permittee decided to accept emission caps to stay under major source thresholds as defined in 401 KAR 52:030. Carbon Monoxide emission (CO) and Volatile Organic Compounds (VOC) are limited to less than 90 tons in any consecutive 12 months.

PERIODIC MONITORING:

N/A

OPERATIONAL FLEXIBILITY:

N/A

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.